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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,140	11/27/2001	Ofir Shalvi	TI-32258	9943
23494	7590	08/10/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			YANG, LINA	
P O BOX 655474, M/S 3999			ART UNIT	
DALLAS, TX 75265			PAPER NUMBER	

2665

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/995,140	SHALVI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lina Yang	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 23-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/13/2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 24-31 are objected to because of the following informalities.  
Claims 24-31 all start with "A method", they should be changed to "The method".  
Appropriate correction is required.
2. Claim 24 recites "a DOCSIS". Please spell "DOCSIS" out.
3. Claim 30 recites "do no" at the end of line 1, please change it to "do not".

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 23-25, 28-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Rabenko et al. (U.S. Patent No. 6,834,057 B1).

Regarding claim 23, Rabenko teaches a method of data communication comprising: allocating a first time slot for a first data stream (fig. 7 region 178); allocating a second time slot for a second data stream (fig. 7 region 178), wherein the first data stream has a higher quality of service (higher priority) assigned than the second data stream and transmitting data streams using corresponding time slots (col. 9 lines 45-50).

Regarding claim 24, Rabenko further teaches the data communication is over a cable network (fig. 2, "HFC" network"); the first time slot is allocated (assigned) by a DOCSIS manager (head end CMTS 1046); and the second time slot is allocated (reserved) by a home network manager ("CM" 1046b) (fig. 7 and the corresponding description).

Regarding claim 25, Rabenko further teaches the second time slot (180 in fig. 7) immediately precedes the first time slot (178 in fig. 7).

Regarding claim 28, Rabenko further teaches the home network manager (CM) is configured to determine timing of the first data stream by exchanging messages with

a cable modem termination system in the cable network ("time synchronization" between CMTS and CM; 116 in fig. 3; col. 7 lines 31-38).

Regarding claim 29, Rabenko further teaches the home network is configured to determining timing of the first data stream using time-sync mechanism of DOCSIS (16 in fig. 10; col. 12 lines 19-23).

Regarding claim 30, Rabenko further teaches the first and second time slots do not overlap (fig. 7, 178 and 180 are separated).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabenko et al. (U.S. Patent No. 6,834,057 B1).

Regarding claim 26, Rabenko differs from the claimed invention in that Rabenko does not specifically teaches that the first time slot immediately precedes the second time slot. However, it's well known in the art that the time slots of different data streams can be timed one precedes another in any order without affecting the data transferring.

Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include teaching the first time slot immediately precedes the second time slot to provide flexibility to the data transferring.

Regarding claim 31, Rabenko differs from the claimed invention in that Rabenko does not specifically teaches allocating a third time slot for a third data stream, wherein the third time slot is used by one or more devices associated with the home network to communicate with one or more of the home network, DOCSIS network, and other devices associated with the home network; and the third time slot immediately precedes one of the first and second time slots. However, it is well known in the art that the figures are usually simplified for the illustration purpose, it is within the skill of an ordinary person in the art to understand that the CM transmission opportunities in fig.7 of Rabenko can contain more than two data regions. Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include allocating a third time slot for a third data stream, wherein the third time slot is used by one or more devices associated with the home network to communicate with one or more of the home network, DOCSIS network, and other devices associated with the home network; and the third time slot immediately precedes one of the first and second time slots in order to accommodate more data communications.

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Rabenko et al. (U.S. Patent No. 6,834,057 B1) in view of Amit (U. S. Patent Application No. 20040107445 A1).

Regarding claim 27, Rabenko differs from the claimed invention in that Rabenko does not specifically teaches that the home network is one or more of a Bluetooth network and an IEEE802.11 network. However, it's well known in the art that Bluetooth network and an IEEE802.11 network are typical home networks. For example, Amit teaches that Bluetooth networks are short-rang wireless home networks and IEEE802.11s are medium rang wireless home networks ([0007]). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include specifying that that the home network is one or more of a Bluetooth network and an IEEE802.11 network as taught by Amit in the assembly of Rabenko in order to be more specific about those two popular home networks.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The amended claim(s) contains new scopes. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached on 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

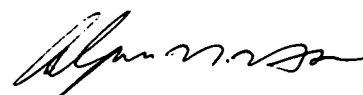
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



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Art Unit: 2665

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A handwritten signature in black ink, appearing to read 'Alpus H. Hsu', written in a cursive style.

**ALPUS H. HSU  
PRIMARY EXAMINER**